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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,347	02/19/2002	Christopher J. Tatar	FS-00689	1368

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EXAMINER
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SHARMA, RASHMI K

ART UNIT	PAPER NUMBER
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3651

DATE MAILED: 01/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/076,347	Applicant(s) TATAR ET AL.	
	Examiner Rashmi K. Sharma	Art Unit 3651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 July 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12 and 13 is/are allowed.
- 6) ☒ Claim(s) 1-7, 9, 14, 15 and 18-21 is/are rejected.
- 7) ☒ Claim(s) 8, 10, 11, 16, 17, 22 and 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "...or a second opposing direction...". This claim limitation is a relative term. It is unclear as to exactly what structure or more specifically exactly what path the second opposing direction must be in alignment with. Further clarification is required.

### ***Claim Rejections - 35 USC ' 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 9, 14, 15 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finch Jr. (US patent number 5,620,102).

Finch Jr. discloses a conveyor sorting system and diverting mechanism for packages comprising a frame member (46) adapted for use with an existing conveyor system (12, 18) for transporting an item in an original direction (here, the direction of conveyance in figure 1), a bi-directional movable diverting mechanism (36) extending from the frame (46) being movable substantially perpendicular to the original direction of travel of the item being transported on the existing conveyor system and diverting the item in either a first direction or a second opposing aligned direction. Finch also discloses a downwardly extending blade (see figure 6) having a first surface and a second surface adapted for diverting the item. The movable diverting mechanism (36) remains stationary allowing items conveyed to pass through without being diverted, a moving mechanism (see figure 2), an actuator (48 or 50), a gliding mechanism (see column 3 lines 39-67) to move the movable diverting mechanism (36), a mounting mechanism (38). Finch Jr. also discloses classification information associated with the item allowing the diverting mechanism (36) to be activated accordingly.

Finch Jr. as disclosed above, fails to show a jam detection sensor for detecting jams exceeding a threshold characteristic to thereby prevent the diverting mechanism from diverting items.

Finch Jr. however, does disclose means (20) for preventing the diverting mechanism (36) from diverting packages in case of jams and/or items prevented from approaching the diverting position (please read column 4 lines 51-67 and column 5 lines 1-4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace Finch Jr.'s means (20) rather than a jam detection sensor in order to control the movement of Finch's diverting mechanism, as they are both functionally equivalent to one another.

***Allowable Subject Matter***

These comments are made in addition to the remarks in Applicant's arguments, concerning the manner in which the invention distinguishes from the art discussed therein.

Claims 12 and 13 have been allowed.

Reasons for allowing claims 12 and 13 have been set forth in the previous Office Action.

Claims 8, 10 and 11 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 16, 17, 22 and 23 have been objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Dependent claims 8, 10, 11, 16, 17, 22 and 23 recite the structural limitations of the package diverting mechanism comprising safety hoods, a home sensor for detecting

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a home position of the downward extending movable blade member, a travel sensor for detecting an over travel position of the downward extending movable blade, a photosensor for detecting a flow of items, an over current sensor for determining whether a current associated with an actuator of the downward extending movable blade member exceeds a threshold limit and momentary contacts which provide an input signal to control the movement of the downward extending movable blade member, the method comprising the step of detecting a jammed item and the detection of the item exceeding a threshold physical characteristic limit is based on a detection of an over current of an actuator which moves the diverting mechanism and wherein the movable diverting mechanism includes a single blade mechanism extending from the frame member to divert the item in either the first direction or the second opposing direction, in combination with the independent claim or any intervening claims, clearly defines over the prior art. See Applicant's remarks dated 7/20/2004 page 10 lines 5-23 and page 11, the last 6 lines.

None of the prior art references taken individually or collectively teach or anticipate the limitations as cited in the above dependent claims. The specific functional arrangement of the plurality of sensors as disclosed in the above objected to dependent claims allows for this diverting mechanism to create a diverting system that reduces the initial scanning process, the accumulating process, the secondary scanning array process and the diverting or sorting process, into a diverting system that increases system efficiency and utilizes less floor space while being capable of diverting heavy packages with much more ease.

### ***Response to Arguments***

Applicant's arguments filed 7/20/2004 have been fully considered but they are not persuasive.

Applicant asserts that Finch does not disclose a divert mechanism having exits in alignment with one another, however this alleged limitation is not recited in claim 1. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

It should be noted that the Examiner's rejection above encompasses each diverting mechanism (36) to be referenced as smaller parts within a larger, whole unit (defined by all diverter's (36) grouped together), thereby having the larger unit as the entire diverting mechanism (36) in order to meet the claim limitations and is not considered to be overly broad with respect to Applicant's claim language.

It should also be noted that Applicant's diverting system being capable of diverting packages using a single blade mechanism is a significant advantage over the Finch reference, however it is suggested that the Applicant's claim language needs to incorporate a clear recitation of this limitation in order to reflect this significant advantage.

Applicant also claims that Finch fails to disclose opposing blade surfaces facing opposing exits or moving the blade there between, however this is not the case. Finch does indeed show opposing blade surfaces facing opposing exits or moving there between as rejected above, as noted above in the broadest sense. Applicant asserts that the gliding mechanism would only move to one exit, however the claim language does not reflect this limitation and therefore this limitation still stand rejected.

Applicant claims that there is only one home position disclosed in the Finch reference, and this is the case if one were to look at each blade separately, however taking the broadest interpretation of Finch, by looking at two diverting blades and exits at a time, there are clearly 2 home positions thereby meeting Applicant's claim limitation as rejected above.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any



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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rashmi K. Sharma whose telephone number is 703-306-5952. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on 703-308-3248. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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